



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,432	02/07/2001	Sidney Shaw White JR.	ESSI:012D1	6574

7590 12/04/2002  
Robert M. O'Keefe  
O'KEEFE, EGAN & PETERMAN  
Building C, Suite 200  
1101 Capital of Texas Highway South  
Austin, TX 78746

EXAMINER

ZIMMER, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 12/04/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/778,432

Applicant(s)

WHITE ET AL.

Examiner

Marc S. Zimmer

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 24-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24,25,27-30 and 35 is/are rejected.
- 7) ☒ Claim(s) 26,31-34 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Response to Arguments***

Claims 24-25, 27-30, and 35 stand rejected as being anticipated by *Bier et al.* in view of their teaching that epoxy-functional silanes could be combined with chelated complexes of aluminum oxalate to produce a scratch resistant layer on a polycarbonate substrate.

Applicant has disputed the notion that *Bier* anticipates these claims. In this connection, the following points are emphasized:

“The organofunctional silanes... comprise an extremely high number of different kinds of organofunctional silanes. The aluminum compounds... also encompass an extremely great number or aluminum compounds.”

Moreover,

“nothing in *Bier* would suggest to the skilled person that there is a particular interest to combine (the compounds recited in claim 1).

Of the silane compounds mentioned in *Bier*, there are only five general types of silane compound that are favored (column 7, lines 34-38). The first one identified is  $\gamma$ -glycidyoxypropyltrialkoxysilane hence, the Examiner disagrees that one of ordinary skill would not have been motivated to select an epoxy-functional silane given the relatively small number of preferred organosilicon compounds identified. As for the aluminum compounds, the Examiner also does not consider the twelve compounds and their corresponding chelates, mentioned in column 6, lines 37-42 as specific embodiments of the aluminum compound (II), to be an exceptionally large list. Even if every combination of preferred silane and aluminum compound was to be investigated, this would only amount to  $5 \times 24 = 120$  total embodiments. In fact, *Bier* advocates using the chelated

Art Unit: 1712

forms of these materials because they are less susceptible to premature hydrolysis (column 6, lines 22-25). Therefore, it could be argued that only 60 of the 120 possibilities are especially preferred. In essence, Bier's disclosure hardly constitutes an invitation to an excessive level of further experimentation, hence, the Examiner remains unconvinced by Applicant's arguments although the Examiner concedes that a rejection under U.S.C. 103 might have been more appropriate insofar as this *combination* is not explicitly taught. Accordingly, the rejection under 35 U.S.C 102 is hereby withdrawn in favor of the rejection set forth below.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-25, 27-30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bier et al., U.S. Patent # 5,849,414. Given the limited number of embodiments drawn from Bier, the instant invention is obvious. Please refer to the Office action dated April 3 (paper no. 7) for a full discussion of how the dependent claim limitations are satisfied.

Seemingly in anticipation of a new rejection under U.S.C 103, the Applicant has also made an assertion of unexpected results. However, "evidence of unexpected properties is to be in the form of a direct or indirect comparison of the claimed invention with the closest (for emphasis) prior art which is commensurate in scope with the

Art Unit: 1712

claims." *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). "Where there are deviations from the closest prior art, they must 1) be explained and 2) shown unlikely to influence the outcome of the comparison. *In re Finley*, 81 USPQ 383; *Ex Parte Armstrong*, 126 USPQ 281; *In re Widmer*, 147 USPQ 518; *In re Magerlein*, 202 USPQ 473. In the present case, Applicant compares the instant invention with a metal carboxylate chelate based on a carboxylic acid other than oxalic acid. This comparison does not represent a showing of an unexpected superior result relative to the closest prior art. Indeed, Applicant would instead be required to show that the other aluminum compounds recited in Bier are inferior to the chelated complex of aluminum oxalate. (Note that a comparison of a chelated aluminum carboxylate other than aluminum oxalate with, for instance, chelated titanium oxalate would not be meaningful insofar as the improved effect could not be categorically attributed to the oxalate counterion since the metal centers would also be different.)

#### ***Allowable Subject Matter***

Claims 26, 31-34, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

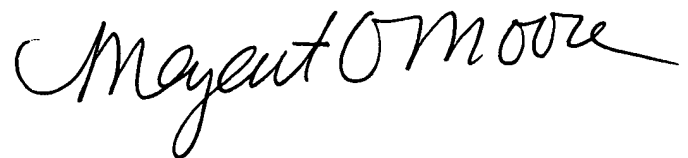
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 703-605-1176. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers

Art Unit: 1712

for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in cursive script that reads "Margaret G. Moore". The signature is written in black ink and is positioned above the printed name and title.

MARGARET G. MOORE  
PRIMARY PATENT EXAMINER  
ART UNIT 1712